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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,902	01/29/2004	Kiyoshi Kohiyama	1448.1050	2615
21171	7590	11/15/2007	EXAMINER	
STAAS & HALSEY LLP			BITAR, NANCY	
SUITE 700				
1201 NEW YORK AVENUE, N.W.			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20005			2624	
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			11/15/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/765,902	KOHIYAMA ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Nancy Bitar	2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 07 August 2007.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-21 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-21 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 29 January 2004 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Arguments*

- Applicant's response to the last Office Action, filed 03/07/2007, has been entered and made of record
  - Applicant has amended claims 1,2,15-21. Claims 1-21 are currently pending.
  - Applicants arguments filed 08/07/2007 have been fully considered but they are not persuasive.
1. Applicant argues that Demos fails to teach selecting at least one watermarking program from among a plurality of watermarking programs for inserting electronic watermark data into moving image data that are encrypted, compressed, or both encrypted and compressed; and selecting at least one area from among a plurality of areas in a processing program that performs decrypting, expanding, or both decrypting and expanding the moving image data; and inserting the watermarking program selected into the area selected.
2. In response, Demos teaches one or more watermarking techniques are then selected, such as a noise-tolerant method and a non-noise tolerant method (STEP

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1402). This may be a single selection applied throughout a watermarking session, or truly may be a selection per unit (or class of units, where two or more watermarking techniques are applied to different types of units). Lastly, the selected unit is watermarked using the selected technique (STEP 1404). The process then repeats for a next unit. Of course, a number of the steps may be carried out in different orders, particularly steps 1400 and 1402. Therefore, Examiner disagree with applicant since by selecting a watermarking technique one is selecting a certain watermarking program from a plurality of programs. Moreover, Demos teaches random variations from the master to uniquely create each watermark, column 22, lines 17-27; and any manual or automatic method of determining regions having detail which the eye will follow can be utilized to select regions which need detail, and to exclude regions where extra detail is not required. The entire image has detail to the level of the base layer, so all of the image is present. Only the areas of special interest benefit from the enhancement layer. Demos clearly teaches selecting at least one unit of one of the base layer or at least one enhancement layer to encrypt; apply at least one selected encryption algorithm to encrypt each selected unit into an encrypted unit. Note that Demos watermark is inserted at a selected location into a video data by all means, a program code is applied to input data (see column 31, lines 1-41). Additionally, the applicant's argument that the combination of all the features recited in claims 1-21 makes the applicant's invention patentable different is not found persuasive and thus Kondo still reads on the applicant's claimed invention.

- 3. All remaining arguments are reliant on the aforementioned and addressed arguments and thus are considered to be wholly addressed herein.

***Claim Rejections - 35 U.S.C. § 102***

- 6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- 7. Claims 1-3,5-10,12-17,19-21 are rejected under 35 U.S.C. § 102(b) as being anticipated by Demos (US 6,957,350).

As to claim 1, Demos et al. teaches an apparatus for creating an image processing program, comprising (watermarking has the goal of placing a symbol and/or serial number style identification marks on the image stream which are detectable to analysis, but which are invisible or nearly invisible in the image, column 22, lines 45-49): a program selecting unit that selects at least one watermarking program from among a plurality of watermarking programs for inserting electronic watermark data (step 1400, figure 14) into moving image data that are encrypted, compressed, or both encrypted and compressed (encryption and watermarking the compressed data, column 21, lines 5-67) ; an area selecting unit that selects at least one area ( it is better to watermark the larger number of B frames , column 22, line 60 and figure 7) for inserting the selected program from among a plurality of areas( watermarking as a function of unit dependency with respect to I,P,B frames, column 22, lines 55) in a processing program

that performs decrypting, expanding, or both decrypting and expanding the moving image data( key management, encryption/decryption, column 28, lines 31-67); and a program inserting unit that inserts the watermarking program selected into the area selected (step 1401, figure 14).

As to claim 2, Demos et al. teaches the apparatus according to claim 1, wherein the program selecting unit selects the watermarking program at random, and the area selecting unit selects the area at random (random variations from the master to uniquely create each watermark, column 22, lines 17-27).

As to claim 3, Demos et al. teaches the apparatus according to claim 1, wherein the electronic watermark data include information unique to an image processing apparatus that executes the processing program (Tying encryption to specific media and/or a specific target location or serial number, column 30, lines 20-27).

As to claim 5, Demos et al. teaches the apparatus according to claim 1, further comprising: a parameter determining unit that randomly determines a parameter necessary to operate the watermarking program selected (The MPEG-2 parameters "lower. sub.-- layer. sub.-- prediction. sub.—horizontal &vertical offset" parameters used as signed negative integers, combined with the "horizontal & vertical.sub.-- subsampling.sub.-- factor.sub.-- m&n" values, can be used to specify the enhancement layer rectangle's overall size and placement within the expanded base layer, column 14, lines 38-45)

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As to claim 6, Demos et al. teaches the apparatus according to claim 1, further comprising: a program rewriting unit that rewrites a jump destination specified by a jump instruction in the processing program from any one of the watermarking programs inserted by the program inserting unit into another watermarking program (The process then repeats for a next unit. Of course, a number of the steps may be carried out in different orders, particularly steps 1400 and 1402, column 28, lines 14-29)

As to claim 7, Demos et al. teaches the apparatus according to claim 6, wherein the program-rewriting unit rewrites the jump destination during an execution of the processing program (note that the computer program execute one or more programmable computers which include the encryption technique, column 27, lines 57-68).

Claims 8-10,12-14 differs from claims 1-7 only in that claim 8-10,12-14 are method claims whereas; claims 1-7 are an apparatus claim. Thus, claims 8-10,12-14 are analyzed as previously discussed with respect to claims 1-7 above.

Claims 15-17,19-21 differs from claims 1-7 only in that claim 15-17,19-21 are computer claims whereas; claims 1-7 are an apparatus claim. Thus, claims 15-17,19-21 are analyzed as previously discussed with respect to claims 1-7 above.

***Claim Rejections - 35 U.S.C. § 103***

8. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences

between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 4-11-18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Demos et al. and in view of Ciacelli et al. (US 6,236,727).

While Demos et al meets a number of the limitations of the claimed invention, as pointed out more fully above, Demos teaches GOP can have the benefits of unique treatment and modularity, and can be decoded and/or decrypted in parallel or out-of-order with other GOPs in non-real-time or near-real-time (slightly delayed by a few seconds) applications (such as electronic cinema and broadcast). The final frames need only be ordered for final presentation, column 23, lines 1-16) but fails to specifically teach that the watermark include a unique tamper resistance module. Specifically, Ciacelli et al. teaches the use the tamper resistance algorithm 114 can be employed to protect the subsequent encryption process, column 6, lines 54-67). Because the use of tamper resistance algorithm in MPEG video decoder 128 to get extensive encryption in order to protect the data. It would have been obvious to one of ordinary skill in the art to use Ciacelli tamper resistance in Demos encryption process in order to protect against unauthorized copying or modification thus increasing authenticity, integrity and establishing the origin of the data. Therefore, the claimed invention would have been obvious to one of ordinary skill in the art at the time of the invention by applicant.

Claim 11 differs from claims 4 only in that claim 11 is method claim whereas, claims 4 is an apparatus claim. Thus, claim 11 is analyzed as previously discussed with respect to claim 4 above.

Claim 18 differs from claims 4 only in that claim 18 is a computer claim whereas, claims 4 is an apparatus claim. Thus, claim 18 is analyzed as previously discussed with respect to claim 4 above.

***Conclusion***

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

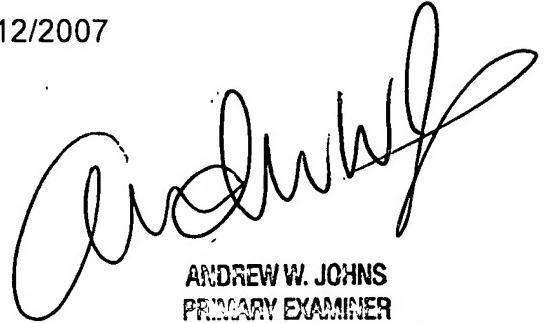
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nancy Bitar whose telephone number is 571-270-1041. The examiner can normally be reached on Mon-Fri (7:30a.m. to 5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on 571-272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nancy Bitar

11/12/2007



ANDREW W. JOHNS  
PRIMARY EXAMINER